



CONSTRUCTION LIFT AND PLACE | LOADALLS

506-36 / 507-42 / 509-42 / 510-42 / 510-56 / 512-56 / 514-56

Gross power: 74 hp / 55 kW – 109 hp / 81 kW Lift capacity: 6,000 lb – 14,000 lb Lift height: 36'4" – 56'



JCB LOADALL: ULTIMATE RETURN ON INVESTMENT.

JCB LOADALL TELESCOPIC HANDLERS ARE SOME OF THE MOST POPULAR CONSTRUCTION VEHICLES IN NORTH AMERICA. AVAILABLE IN A VARIETY OF CONFIGURATIONS AND SIZES, JCB TELEHANDLERS OFFER ADVANTAGES IN DURABILITY, VERSATILITY AND LOW COST OF OWNERSHIP NECESSARY TO SUCCEED IN TODAY'S COMPETITIVE CONSTRUCTION MARKET.

JCB pioneered the telehandler concept in 1977 and remains the world's number one telehandler manufacturer to this day.

JCB Loadall telehandler components—including engines, axles, rams, chassis and booms—are designed and manufactured by JCB, ensuring all systems are perfectly matched and fully integrated for optimal performance.

The JCB EcoMAX Tier 4 Final engine, for example, is efficient, reliable and designed to work in perfect harmony with the drivetrain. Similarly, JCB chassis and booms are designed with the benefit of more than 70 years of engineering experience and built to handle the rigors of the construction industry.

JCB Loadall telescopic handlers feature extended service intervals and simplified maintenance procedures, and are supported by a global JCB dealer network for parts and service. When the time comes to upgrade your fleet, you can be assured that JCB telehandlers command premium resale values.

For customers who demand strength, productivity, serviceability, safety and low cost of ownership, a JCB Loadall is the telescopic handler of choice.





ULTIMATE PERFORMANCE, ULTIMATE PRODUCTIVITY.

THE COMPREHESIVE RANGE OF JCB LOADALL TELEHANDLERS DELIVERS INDUSTRY-LEADING PERFORMANCE, VERSATILITY, VISIBILITY, CYCLE TIMES AND OPERATOR COMFORT.

A productive machine.

- 1 JCB Loadall telehandlers feature a compact wheelbase and large steering lock angles for enhanced maneuverability, saving operators valuable time on site, especially where space is limited.
- 2 With a wide range of JCB Loadall models available, customers can select the lift height, lift capacity and features that best meet the demands of their construction projects.
- 3 The responsive and efficient JCB EcoMAX T4 Final engine delivers exceptional power and torque at low engine speeds.

Productive lifting and hydraulics.

- 4 For fast and precise control, JCB Loadalls are fitted with an ergonomically-designed, fully proportional single-lever joystick.
- 5 A sway frame enables the operator to make the machine absolutely level prior to lifting.
- 6 Auxiliary spools are fitted as standard, to accommodate a wide range of attachments for maximum versatility.

Variable-geometry turbo technology provides excellent performance at low revs, for superior fuel efficiency.



Stability meets agility.

7 Rear axle stabilization, standard on 507- to 514- models, improves stability while lifting.

8 JCB telehandlers are equipped with three selectable steer modes. Two-wheel steer is best for traveling at high speed on the road; four-wheel steer is ideal for working in tight spaces; and crab steer enables maneuvering close to walls and buildings.

9 High-lift 510- to 514- models are equipped with front stabilizers to maximize lift capacity.



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A SOUND INVESTMENT.

JCB LOADALL TELEHANDLERS ARE DESIGNED FOR MAXIMUM RETURN ON INVESTMENT, WITH EXCELLENT FUEL EFFICIENCY, LOW RUNNING COSTS AND EXCELLENT RESALE VALUES.

JCB EcoMAX engines deliver high power and torque as low as 1300-1400 RPM, for fuel-efficient matching of transmission and hydraulics.



EcoMAX efficiency.

1 JCB Loadall telehandlers meet Tier 4 Final emissions standards with a sealed-for-life SCR system that requires no separate diesel particulate filter (DPF) or productivity-sapping DPF regeneration.

2 Inside the cab, the operator uses a dash-mounted 3.5-inch color TFT screen to monitor fuel and DEF (Diesel Exhaust Fluid) levels, as well as fuel consumption rates and service warnings.

3 JCB Loadalls feature a precise, high-speed, double-boom-chain extension system for enhanced efficiency.



Cost of ownership.

4 JCB's 74 hp (55 kW) engine is Tier 4 Final compliant and requires no Diesel Particulate Filter (DPF) and no Diesel Engine Fluid (DEF). JCB engines can also be remapped to run on lower-grade fuels, allowing machines to be resold across different territories (where legislation permits) to boost to resale values.

5 Thanks to JCB's outstanding build quality and renowned performance, JCB telehandlers are in high demand around the world and command excellent resale prices in all construction markets.

6 An available semi-solid tire option protects against punctures to minimize down time.

7 JCB Loadall telehandlers appeal to owners and fleet managers who prioritize maximum uptime and low cost of ownership.



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STRENGTH AND DURABILITY.

JCB LOADALLS ARE CONSTRUCTED WITH HIGH-QUALITY COMPONENTS AND INNOVATIVE MANUFACTURING PROCESSES, TO DELIVER MAXIMUM AVAILABILITY AND A LONG SERVICE LIFE.

Tough boom design.

- 1 Large boom overlaps of up to 3.2 feet ensure strength and durability.
- 2 Hoses are routed through the boom for maximum protection.

Built-in protection.

- 3 Engine hoods are side-mounted and recessed for protection from damage.
- 4 The optional rear lights can be folded out of harm's way.
- 5 Optional front and top screen roof guards provide protection from falling objects.

The cab is dipped in electrophoretic alloy prior to painting, for long-term corrosion protection.

A tough, inverted U-shaped boom pressing, with fully-welded closing plates, provides superior strength. JCB machines also feature fewer joints and stress points across the integrated boom nose and a one-piece closing plate.



A one-piece, fully-welded chassis provides maximum strength and reduced weight. The boom is mounted high on the chassis for enhanced structural rigidity and improved visibility.



Durable components.

E JCB telehandlers undergo a stringent testing program that includes thousands of transmission cycles and prolonged high-stress loading of the chassis, boom and other key components.

Z The Tier 4 Final engine builds on the proven success of the JCB EcoMAX platform and benefits from more than 200,000 hours of testing across the toughest applications and environments.

E All hydraulic cylinders, cabs, axles, transmissions and engines are built by JCB, and designed to work in perfect harmony for optimum reliability.

JCB Loadalls boast 500-hour extended service intervals and simplified maintenance procedures. JCB's worldwide dealer network provides a 'one stop shop' for parts and service.



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A SLICK OPERATION.

JCB LOADALLS FEATURE SOME OF THE LARGEST CABS AND CANOPIES ON THE MARKET. CABS PROVIDE CLASS-LEADING LOW NOISE LEVELS AND EXCELLENT AIR FLOW, VENTILATION AND DEMISTING; OPTIONAL AIR CONDITIONING AND A FULLY ADJUSTABLE SUSPENSION SEAT AND STEERING COLUMN, ENSURE COMFORTABLE, DISTRACTION-FREE OPERATION.



Ergonomic controls.

1 For precise control and intuitive operation, JCB Loadalls are fitted with an ergonomically-designed, fully proportional, single-lever joystick.

2 Switches are all backlit for easy recognition, even in dark conditions.

3 New instruments and a 3.5-inch color TFT screen form an intuitive, automotive-style layout.



Comfort and convenience.

- 4** Excellent all-around visibility thanks to direct glazing, large roof screen and low engine bay.
 - 5** The 7-speed fan heater creates a comfortable, productive operator environment. Optional air conditioning is ideal for work sites in hotter climates.
 - 6** Optional adjustable, tilting, telescopic steering column.
- The exterior top door slam latch allows the upper door to be closed from outside.
- 7** Standard-fit JCB fenders provide superior protection from dirt and spray.
 - 8** A choice of two operator environments to suit any climate: fully-glazed cab or canopy.



SAFE AND SECURE.

JCB LOADALLS REDUCE THE THREAT OF POTENTIALLY HAZARDOUS SITUATIONS. ADVANCED SAFETY FEATURES HELP PREVENT ACCIDENTS WHILE JCB SECURITY TECHNOLOGY GUARDS AGAINST THEFT.

A safer choice.

1 For quick, easy and safe access, JCB Loadall operators maintain three points of contact when entering or exiting the machine.

2 Hose burst check valves on the rams prevent collapse in the event of a hose failure.

3 JCB Loadall telehandlers have excellent rearward visibility. The high boom profile and pivot provide good side visibility.

A reverse alarm is a standard feature on all JCB telehandlers.

4 Side and rear view mirrors for all-around visibility and safety.

5 To keep operators safe at all times, JCB cabs and canopies are ROPS and FOPS certified.

6 JCB's innovative boom features a robust, double-chain system.



LESS SERVICING, MORE SERVICE.

YOU WANT YOUR TELEHANDLER TO WORK, NOT BE WORKED ON. JCB LOADALLS FEATURE EXTENDED SERVICE INTERVALS; WHEN MAINTENANCE IS REQUIRED, SERVICE POINTS ARE EASY TO REACH.

For fast, easy engine inspection, JCB Loadalls have a large, wide service bay, accessed by a gas-assisted engine hood.

Minimizing downtime.

- 1** Diesel and DEF tanks are filled from ground level and include built-in pre-filters in the filler necks to guard against dirt and contaminants.
- 2** Twin batteries are fitted on 509- to 514-models to aid cold starting. A hinged door provides easy access, with locking bolts for security.
- 3** All daily checks and greasing are performed at ground level.
- 4** A dry lubricant system aids in wear pad durability, to extend service intervals to 500 hours.
- 5** Filters for engine oil, hydraulic oil and fuel are centrally located for easy servicing. The air filter is easily accessible, and features a double-element design for simplified cleaning.



THE JCB ENERGY MASTER LOADALL.

THE JCB ENERGY MASTER LOADALL RANGE IS DESIGNED TO MEET THE EXACT NEEDS OF THE OIL AND GAS SECTORS. JCB'S ENERGY MASTER KIT IS AVAILABLE ON 509- TO 514- LOADALL MODELS AND WILL EXCEL IN ANY CONDITIONS, FROM THE BLAZING SUN OF TEXAS TO THE FROZEN TUNDRA OF ALASKA.

Fully charged for energy applications.

1 Operate with near-daylight visibility in any light conditions with extra LED spotlights available for the front and rear of the cab. Additional boom and peripheral work light options are also available.

2 To comply with oil and gas regulations, and for safe operation, Energy Master Loadalls are fitted with a strobe or flashing beacon and internal and external fire extinguishers.

3 Energy Master machines feature unique and distinctive branding.

4 Auxiliary venting allows attachments to be switched quickly and efficiently.

5 Front stabilizers* increase lifting capacity and provide a stable platform even on undulating ground.

6 A steel lower door provides enhanced operator safety (instead of side glass) on canopy cabs.

**Model dependent.*



Drilling down time.

- 7** Single-lever joystick controls for smooth, precise and efficient operation.
 - 8** An auxiliary relief valve fitted to the boom retract system prevents operators from using the boom to pull excessive loads.
 - 9** An available semi-solid tire option protects from punctures, potentially increasing uptime and decreasing operating costs.
 - 10** A crane hook option enhances suspended load operations. Mounted on the boom nose end, this useful feature allows operators to hook onto varying load types without changing attachments.
- A 6,000 lb tow hitch is available, to aid in moving equipment around the work site.



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LIVELINK, WORK SMARTER.

LiveLink tracks the efficiency of your machines to maximize ROI.

- Manage your fleet from anywhere
- Reduce operating costs
- Improve productivity
- Monitor fuel and consumption*
- Receive reports by day / week / month

*For machines with electronic engine management system only

LiveLink sends service alerts and diagnostic warnings for effective maintenance planning.

- Machine health alerts
- Machine service alerts
- Accurate hours recorded
- Detailed machine history



LiveLink reports the exact location, movement and activity of your machine for improved security.

- Pinpoint machine location
- 24/7 update on your phone/tablet
- Real-time curfew alerts
- Real-time geofence alerts
- Back-up battery
- Tow-away alert



Superior Build Quality

Machine Servicing Agreement

Enhanced Dealer Support

JCB LiveLink



Note: Please consult your local dealer for LiveLink availability.

VALUE ADDED.

WHATEVER YOU NEED AND WHEREVER YOU ARE, JCB'S DEPENDABLE NORTH AMERICAN DEALER NETWORK IS HERE TO MAKE SURE YOUR MACHINERY PERFORMS TO ITS FULL POTENTIAL.



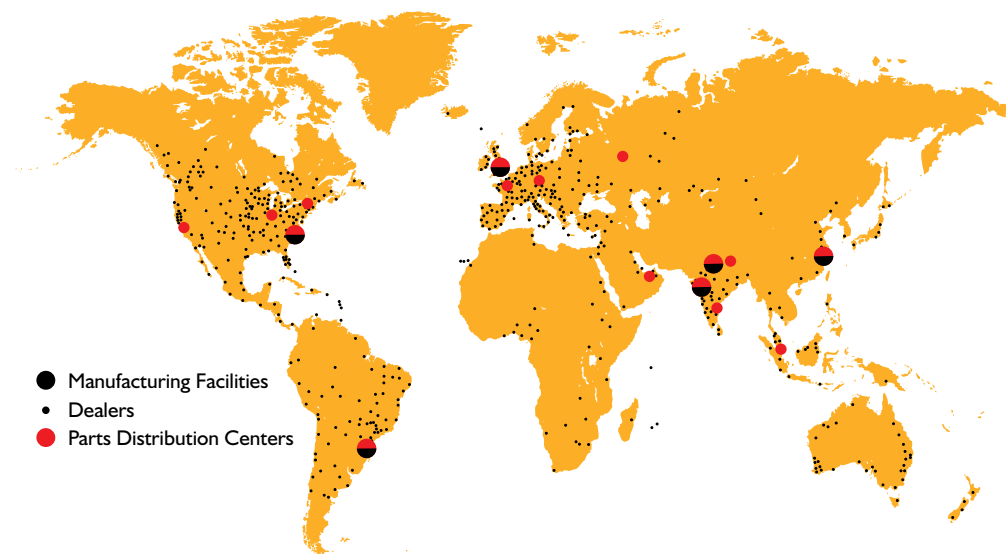
1 JCB Technical Support Service provides instant access to factory expertise, day or night.

JCB's Finance and Insurance teams are always on hand to provide fast, flexible, competitive quotes.

2 The global network of JCB Parts Centers is a model of efficiency. With 16 regional bases, we can deliver around 95 percent of all parts anywhere in the world within 24 hours. Our genuine JCB parts are designed to work in perfect harmony with your machine for optimum performance and productivity.



3 JCB Yellow Shield offers comprehensive extended warranties and service agreements, as well as service-only or repair and maintenance contracts. JCB maintenance teams offer competitive labor rates and no-obligation quotes.



- Manufacturing Facilities
- Dealers
- Parts Distribution Centers

ATTACHMENTS.

THE EFFICIENCY AND PRODUCTIVITY OF A JCB TELEHANDLER IS ENHANCED BY THE EXTENSIVE RANGE OF JCB ATTACHMENTS.

Wide range of carriages and attachments.

1 Standard fork carriages are available from 48 inches to 66 inches wide, to match the job at hand. A quick attach system makes attachment changes quick and easy.

Side-tilting and side-shifting carriages are also available for enhanced load positioning.

2 A crane hook mounted on the forks aids in efficient handling of suspended loads.

3 An optional lightweight trash shovel provides added versatility around any work site to handle trash and small amounts of aggregate.

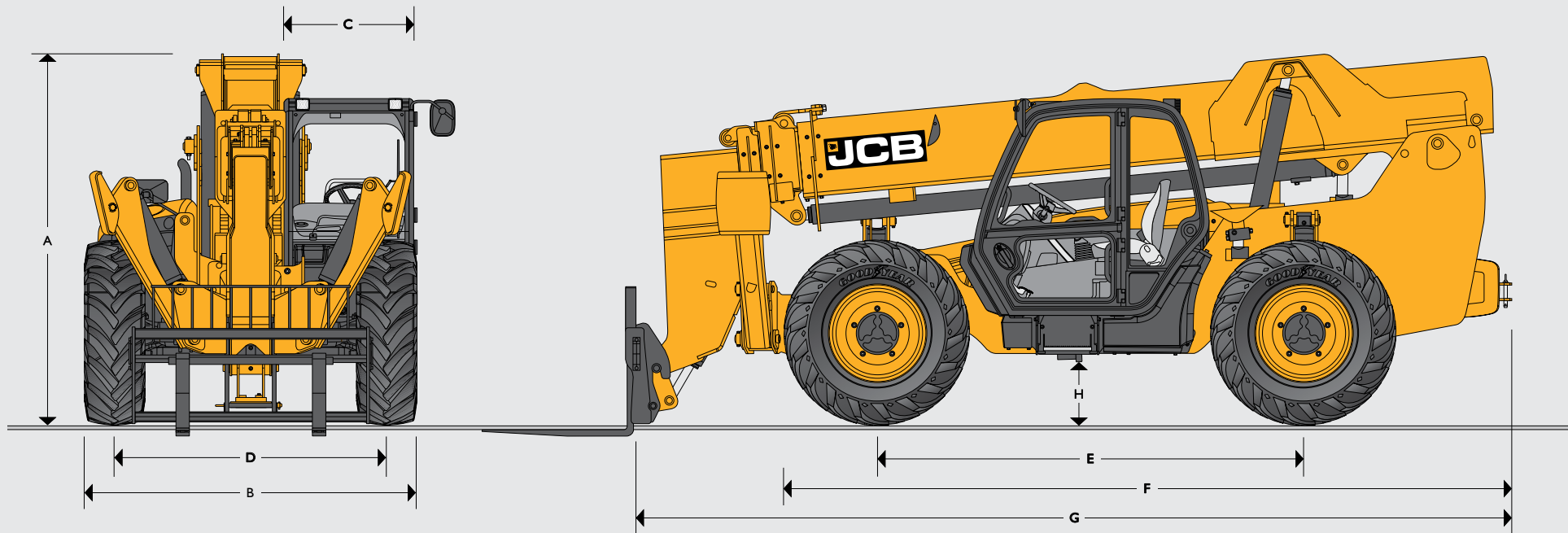
4 A heavy-duty extendable jib will extend the carriage, providing extra reach for lighter loads.

Single auxiliary hydraulics fitted as standard on all models.



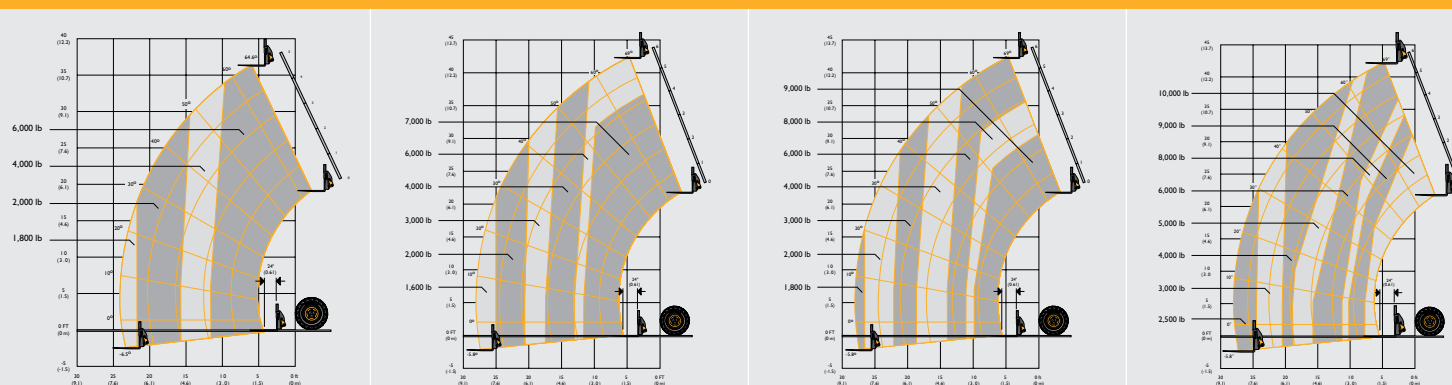


STATIC DIMENSIONS

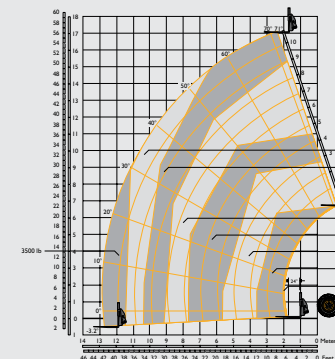
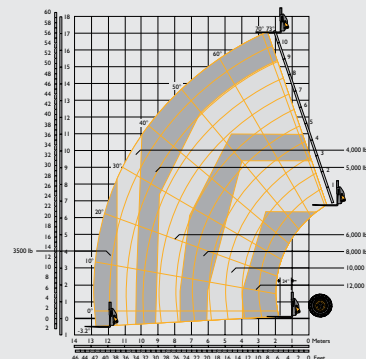
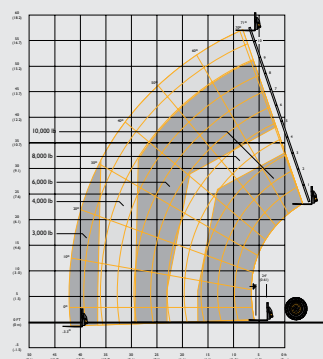


Machine model		506-36	507-42	509-42	510-42	510-56	512-56	514-56
A Overall height	ft-in (mm)	8-3 (2,510)	8-3 (2,525)	8-3 (2,525)	8-3 (2,525)	8-10 (2,692)	8-10 (2,692)	8-11 (2,716)
B Overall width (over tires)	ft-in (mm)	7-10 (2,388)	7-10 (2,388)	7-10 (2,388)	7-10 (2,388)	8-1 (2,471)	8-1 (2,471)	8-1 (2,475)
C Inside width of cab	ft-in (mm)	3-1 (940)	3-1 (940)	3-1 (940)	3-1 (940)	3-1 (940)	3-1 (940)	3-1 (940)
D Front track	ft-in (mm)	6-4 (1,936)	6-7 (2,008)	6-7 (2,008)	6-7 (2,008)	6-7 (2,008)	6-7 (2,008)	6-7 (2,008)
E Wheelbase	ft-in (mm)	10-4 (3,150)	10-4 (3,150)	10-4 (3,150)	10-4 (3,150)	10-4 (3,150)	10-4 (3,150)	10-4 (3,150)
F Overall length to front tires	ft-in (mm)	17-1 (5,211)	17-8 (5,386)	17-0 (5,183)	17-8 (5,385)	17-9 (5,406)	17-9 (5,406)	18-4 (5,596)
G Overall length to front carriage	ft-in (mm)	19-5 (5,918)	21-3 (6,477)	20-7 (6,274)	21-3 (6,477)	21-7 (6,579)	21-7 (6,579)	22-4 (6,815)
H Ground clearance	ft-in (mm)	1-3½ (396)	1-3½ (396)	1-3½ (396)	1-3½ (396)	1-5½ (444)	1-5½ (444)	1-5½ (444)
Outside turn radius (over tires)	ft-in (mm)	14-6 (4,420)	13-9 (4,191)	13-9 (4,191)	13-9 (4,191)	14-1 (4,293)	14-1 (4,293)	14-4 (4,365)
Weight	lb (kg)	20,270 (9,193)	21,300 (9,660)	22,430 (10,172)	23,858 (10,822)	29,900 (13,560)	30,635 (13,895)	32,143 (14,580)
Tires		13.00-24	14.00-24	14.00-24	14.00-24	17.5-25	17.5-25	17.5-25

LIFT PERFORMANCE



Machine model		506-36	507-42	509-42	510-42
Lift height	ft-in (mm)	36-4 (11,070)	42-0 (12,800)	42-0 (12,800)	42-0 (12,800)
Maximum lift capacity	lb (kg)	6,000 (2,722)	7,000 (3,175)	9,000 (4,084)	10,000 (4,537)
Lift capacity to full height (on tires)	lb (kg)	6,000 (2,722)	6,000 (2,722)	6,000 (2,722)	6,000 (2,722)
Lift capacity at full reach	lb (kg)	1,800 (816)	1,600 (725)	1,800 (816)	2,500 (1,133)
Reach at maximum lift height	ft-in (mm)	6-4 (1,930)	4-11 (1,500)	4-11 (1,500)	4-11 (1,500)
Maximum forward reach	ft-in (mm)	24-0 (7,310)	28-0 (8,530)	28-0 (8,530)	28-0 (8,530)
Frame sway left or right	degrees	10	10	10	10



Machine model		510-56	512-56	514-56
Lift height	ft-in (mm)	56-0 (17,070)	56-0 (17,070)	56-0 (17,070)
Maximum lift capacity	lb (kg)	10,000 (4,537)	12,000 (5,444)	14,000 (6,350)
Lift capacity to full height (on tires)	lb (kg)	3,000 (1,361)	4,000 (1,814)	4,000 (1,814)
Lift capacity to full height (on stabilizers)	lb (kg)	4,000 (1,814)	5,000 (2,268)	5,000 (2,268)
Lift capacity at full reach (on tires)	lb (kg)	300 (136)	300 (136)	500 (227)
Lift capacity at full reach (on stabilizers)	lb (kg)	3,000 (1,360)	3,500 (1,587)	3,500 (1,587)
Reach at maximum lift height	ft-in (mm)	8-2 (2,490)	8-2 (2,490)	8-2 (2,490)
Maximum forward reach	ft-in (mm)	42-0 (12,800)	42-0 (12,800)	42-0 (12,800)
Frame sway left or right	degrees	10	10	10

ENGINE			
Machine model		506-36 / 507-42 / 509-42 / 510-42 / 510-56	509-42 S / 510-42 S / 510-56 S / 512-56 S / 514-56 S
Emissions level		Tier 4	Tier 4
Manufacturer		JCB	JCB
Displacement	ltr	4.4	4.4
No. of cylinders		4	4
Bore size	in (mm)	4.05" (103)	4.05" (103)
Stroke	in (mm)	5.0" (132)	5.0" (132)
Aspiration		Turbocharged cooled & Intercooler	Turbocharged cooled & Intercooler
Power rating			
Power @ 2200 RPM	hp (kW)	74 (55)	109 (81)
Torque rating			
Torque @ 1300 RPM	Nm	400	504 (516 @ 1,500 RPM)
After treatment		N/A	SCR & DEF

SERVICE CAPACITIES			
Hydraulic tank	gallon (liters)		35 (132)
Coolant	gallon (liters)		6 (23)
Engine oil sump	gallon (liters)		3.6 (14)
Fuel tank	gallon (liters)		33.3 (126.3)
DEF tank (Adblue)	gallon (liters)		4.5 (17.3)

HYDRAULICS			
Two stage gear pump with suction strainer and filter			
Operating system pressure		psi (bar)	3,770 (260)
Main hydraulics		gpm (lpm)	29 (110)
TRANSMISSION		JCB powershift transmission incorporating torque converter, bevel box and a 4 speed powershift gearbox in one resiliently mounted unit. Front and rear drive axles: JCB epicyclic hub reduction drive/steer axles with Max-Trac torque proportioning differentials. Travel speed: 15.5 mph (25 kph).	
BRAKES		Service brakes: Hydraulically activated, self-adjusting, oil-immersed in-board high back-off multi-disc type on front axle. Parking brake: Hand-operated disc brake on output of gearbox (55 kW/74 hp, 81 kW/109 hp) – oil immersed disc type).	
BOOM AND CARRIAGE		Boom is manufactured from high tensile steel. JCB self-levelling carriage pallet forks and a wide range of attachments.	
ELECTRICS		12 V negative earth. 95 AH battery. 95 amp alternator. Full road lighting. Reversing light. Direction indicators.	
STEERING		Hydrostatic power steering with power track rods on both axles. Three steer mode options: front wheel steer; all wheel steer; crab steer: operated from in the cab by a selection lever.	
CAB		Quiet, safe and comfortable cab conforms to ROPS ISO 3471 and FOPS ISO 3449. Tinted glass all round with laminated front and roof screen. Roof bars, front, rear and roof screen wash/wipe and heater/screen demister. Audio-visual warning system for coolant temperature, water in fuel, engine oil pressure, air cleaner, battery charge, transmission oil temperature and pressure. Hour meter and road speed indicator. Engine temperature, fuel gauge and clock. Adjustable steering column with stalk bar powershift change and forward reverse shuttle. Throttle and brake pedal floor mounted. Adjustable suspension seat with adjacent park brake.	
OPTIONS AND ACCESSORIES		Front and rear working lights, rotating flashing beacon, fire extinguisher, radial industrial tires, windshield and roof guard, radio kit, air conditioning, carriage options available – contact your local dealer.	

CYCLE TIMES								
Machine model		506-36	507-42	509-42	510-42	510-56	512-56	514-56
Lift	Seconds	11.2	11.7	13.8	13.8	18	18	16.8
Lower	Seconds	7.3	7.6	9.2	9.2	12.4	12.4	15.5
Extend	Seconds	8.5	9.7	9.7	9.7	24.2	24.2	22.7
Retract	Seconds	9.9	10.6	10.6	10.6	16.4	16.4	16.4
Bucket dump	Seconds	4	4	4	4	6.4	6.4	6.4
Bucket crowd	Seconds	3	3	3	3	3.7	3.7	4.5
Stabilizer down	Seconds	N/A	N/A	N/A	N/A	5.5	5.5	5.5
Stabilizer up	Seconds	N/A	N/A	N/A	N/A	4	4	4
Rear Axle Stabilization (RAS) System	Seconds	No	Yes	Yes	Yes	Yes	Yes	Yes

ENERGY MASTER SPECIFICATION							
Machine model	506-36	507-42	509-42	510-42	510-56	512-56	514-56
LED boom work lights (boom)	N/A	N/A	●	●	●	●	●
LED work lights (front and rear)	N/A	N/A	●	●	●	●	●
LED work lights (peripheral)	N/A	N/A	●	●	●	●	●
Single lever joystick	N/A	N/A	●	●	●	●	●
Fire extinguishers internal and external	N/A	N/A	●	●	●	●	●
Boom retract ARV	N/A	N/A	●	●	●	●	●
Auxiliary venting	N/A	N/A	●	●	●	●	●
Steel lower door	N/A	N/A	●	●	●	●	●
Solideal 14-24 solid fill	N/A	N/A	●	●	●	●	●
Mechanical tow hitch 6,000 lb	N/A	N/A	●	●	●	●	●
Boom sky hook	N/A	N/A	●	●	●	●	●
Mesh side screen (canopy cab option only)	N/A	N/A	○	○	○	○	○
Energy Master branding decal	N/A	N/A	●	●	●	●	●
Beacon strobe light	N/A	N/A	●	●	●	●	●

● Standard

○ Option

